

4. Process according to claim 1, wherein the mixture of aminonitrile in the water vapor that is obtained is brought rapidly in a heat exchanger to a temperature at which the vaporization of the mixture is complete.

5. Process according to claim 1, wherein the mixture of aminonitrile in the water vapor that is obtained is brought to the temperature of reaction between the aminonitrile and water.

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cont

6. Process according to claim 1, wherein the aminonitrile is a linear or branched aliphatic aminonitrile having 3 to 12 carbon atoms.

7. Process according to claim 1, wherein the aminonitrile originates from the hydrogenation to a primary amine function of one of the two nitrile functions of a dinitrile selected from adiponitrile, methylglutaronitrile, ethylsuccinonitrile, dimethylsuccinonitrile, malononitrile, succinonitrile, glutaronitrile and dodecanedinitrile.

8. Process according to claim 1, wherein the vaporization of the aminonitrile is conducted under an absolute pressure of from 0.1 to 3 bar.

9. Process according to claim 1, wherein it is performed with a system without retention of liquid.

10. Process according to claim 9, wherein one of the following technologies is employed:

- evaporation of the aminonitrile as a film on a heated surface, in a falling-film evaporator;
- evaporation of an at least partly liquid mist of aminonitrile in the superheated water vapor.

11. Process according to claim 10, wherein the distribution of the aminonitrile over the tubes of the falling-film evaporator is carried out by:

- supplying the at least partly liquid aminonitrile to the tube plate, then distributing this aminonitrile in each tube;
- distributing the at least partly liquid aminonitrile in each tube by atomization to a mist of the aminonitrile above the tube plate.

12. Process according to claim 10, wherein the evaporation of an at least partly liquid mist of aminonitrile in superheated water vapor is single-stage or multistage.

13. Process according to claim 1, wherein the system for vaporizing the aminonitrile is selected such that the dwell time of liquid aminonitrile in the [said] system is less than or equal to one minute.

*Please add new claims 14-21 as follows:*

14. (New) Process according to claim 1, further comprising vaporizing the aminonitrile and the water.
15. (New) Process according to claim 2, wherein the water vapor is employed at a temperature of from 200 to 550°C.
16. (New) Process according to claim 3, wherein the aminonitrile is employed at a temperature of from 100 to 250°C.
17. (New) Process according to claim 1, wherein the mixture of aminonitrile in the water vapor is brought to a temperature of from 200 to 450°C.
18. (New) Process according to claim 17, wherein the mixture of aminonitrile in the water vapor is brought to a temperature of from 250 to 400°C.
19. (New) The process of claim 7, wherein the aminonitrile comprises 6-amino-capronitrile.

20. (New) The process of claim 13, wherein the system for vaporizing the aminonitrile is selected such that the dwell time of liquid aminonitrile in the system is less than or equal to 5 seconds.

21. (New) The process of claim 1, wherein the process occurs prior to a reaction between the aminonitrile and the water.